

Active Recombinant Human ADIPOQ Protein (227 aa)

Cat. No. ADIPOQ-444A **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human Adiponectin (rhAdiponectin) produced in E. coli is a single non-glycosylated polypeptide chain containing 227 amino acids. A fully biologically active molecule, rhAdiponectin has a molecular mass of 24.7 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.
Species	Human
Source	E.coli
ProteinLength	227
Description	Adiponectin is a hormone mainly produced by adipocytes. Adiponectin forms a homotrimer and exists as higher order multimers in vivo. The receptors of Adiponectin are seven-transmembrane G protein coupled receptors: Receptor 1 is expressed in skeletal muscle and Receptor 2 in liver. Adiponectin receives a lot of attention because of its anti-diabetic, anti-atherosclerotic, and anti-inflammatory properties. Adiponectin increases the expression of molecules involved in fatty acid transport, combustion of fatty acid, and energy dissipation, and increases insulin sensitivity of the body. Decreased levels of Adiponectin are associated with hypertension, cardiovascular diseases, and metabolic syndromes. Therefore, Adiponectin has promising potential as a pharmacological agent.
Form	Sterile Filtered White lyophilized (freeze-dried) powder.
Bio-activity	ED50 < 5

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	μg/mL, measured by a cell growth inhibitory assay using M1 cells, corresponding to a specific activity of $> 2 \times 10^2$ units/mg.
Molecular Mass	24.7 kDa, observed by reducing SDS-PAGE.
AA Sequence	METTTQGPGLVLLPLPKGACTGWMAGIPGHPGHNGAPGRDGRDGTGPGEKGEKGDP GLIGPKGDIGETGVPGAEGPRGFPGIQRKGEPGEGAYVYRSAFSVGLETYVTIPN MPIRFTKIFYNQNNHYDGSTGKFHCNIPGLYYFAYHITVYMKDVKVSFLFKDKAMLFT YDQYQENNVDDQASGSVLLHLEVGDQVWLQVYGEGERNGLYADNDNDSTFTGFLLY HDTN
Endotoxin	< 0.2 EU/μg, determined by LAL method.
Purity	> 95% as analyzed by SDS-PAGE and HPLC.
Storage	Lyophilized recombinant human Adiponectin (rhAdiponectin) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rhAdiponectin remains stable up to 2 weeks at 4 centigrade or up to 3 months at -20 centigrade.
Storage Buffer	Lyophilized after extensive dialysis against 50 mM Tris, 150 mM NaCl, pH8.0.
Reconstitution	Reconstituted in ddH2O at 100 μg/mL.

GENE INFORMATION

Gene Name	ADIPOQ adiponectin, C1Q and collagen domain containing [Homo sapiens]
Official Symbol	ADIPOQ
Synonyms	ADIPOQ; adiponectin, C1Q and collagen domain containing; ACDC, adipocyte, C1Q and collagen domain containing; adiponectin; ACRP30; AdipoQ; adipose most

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abundant gene transcript 1; apM1; GBP28; gelatin-binding protein 28; adipose specific collagen-like factor; 30 kDa adipocyte complement-related protein; adipocyte complement-related 30 kDa protein; adipose most abundant gene transcript 1 protein; ACDC; ADPN; APM1; APM-1; ADIPQTL1;

Gene ID	9370
mRNA Refseq	NM_001177800
Protein Refseq	NP_001171271
MIM	605441
UniProt ID	Q15848

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